



August 23, 2010

Jocelyn Boyd, Esquire
Chief Clerk and Administrator
South Carolina Public Service Commission
Post Office Drawer 11649
Columbia, South Carolina 29211

Re: Carolina Power & Light Company d/b/a Progress Energy Carolinas, Inc.
Power Plant Performance Report
Docket No. 2006-224-E

Dear Mrs. Boyd:

Enclosed is the Power Plant Performance Report for Carolina Power & Light Company d/b/a Progress Energy Carolinas, Inc. for the month of July 2010.

Sincerely,

Len S. Anthony (by dhs)

Len S. Anthony
General Counsel
Progress Energy Carolinas, Inc.

LSA/dhs
Attachment
45612

c: John Flitter (ORS)

July 2010

The following units had no off-line outages during the month of July:

Brunswick Unit 1
Brunswick Unit 2
Harris Unit 1
Roxboro Unit 2
Roxboro Unit 3
Roxboro Unit 4

Robinson Unit 2

Full Scheduled Outage

- A. Duration: The unit began a refueling outage at 0:00 on April 17, and was returned to service at 23:06 on July 19, a duration of 2,255 hours and 6 minutes. The unit was offline for 455 hours and 6 minutes during the month of July.
- B. Cause: Scheduled Refueling Outage
- C. Explanation: After experiencing a fire and reactor trip associated with the 4-kV power supply to non-vital bus 5, the unit began to transition into the scheduled refueling outage approximately ten days early. By industry standards, the refueling outage officially began April 17, the official scheduled start date. In addition to refueling, required maintenance and inspections were conducted during the outage.
- D. Corrective Action: Planned outage activities, including refueling, inspections, repairs to the 4-kV busses and electrical components damaged by the fire, and other maintenance activities, were completed. The unit was returned to service upon completion of refueling, maintenance, inspections, and testing activities.

Mayo Unit 1

Full Scheduled Outage

- A. Duration: The unit was taken out of service at 2:06 on July 17, and was returned to service at 4:02 on July 19, a duration of 49 hours and 56 minutes.
- B. Cause: Replacement of Voltage Regulator
- C. Explanation: The unit was taken out of service to investigate voltage spikes experienced by the unit's generator CT circuit and irregularities in the automatic voltage regulator (AVR) response.
- D. Corrective Action: Upon inspection and investigation of the generator CT circuit and excitation switchgear, a voltage regulator was replaced to address issues pertaining to voltage spikes and AVR response irregularities. The unit was returned to service upon completion of inspection and repairs.

	Month of July 2010		Twelve Month Summary		See Notes*
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MDC	938 MW		950 MW		1
Period Hours	744 HOURS		8,760 HOURS		
Net Generation	700,560 MWH		6,499,941 MWH		2
Capacity Factor	100.39 %		78.09 %		
Equivalent Availability	98.83 %		78.04 %		
Output Factor	100.39 %		98.32 %		
Heat Rate	10,491 BTU/KWH		10,473 BTU/KWH		
	MWH	% of Possible	MWH	% of Possible	
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Full Scheduled	0	0.00	1,382,550	16.61	3
Partial Scheduled	8,173	1.17	88,056	1.06	4
Full Forced	0	0.00	329,895	3.96	5
Partial Forced	0	0.00	107,496	1.29	6
Economic Dispatch	0	0.00	0	0.00	7
Possible MWH	697,872		8,324,920		8

* See 'Notes for Nuclear Units' filed with the January 2010 report.

** Gross of Power Agency

	Month of July 2010		Twelve Month Summary		See Notes*
MDC	920 MW		931 MW		1
Period Hours	744 HOURS		8,760 HOURS		
Net Generation	688,328 MWH		7,774,484 MWH		2
Capacity Factor	100.56 %		95.34 %		
Equivalent Availability	100.00 %		94.59 %		
Output Factor	100.56 %		99.49 %		
Heat Rate	10,766 BTU/KWH		10,609 BTU/KWH		
	MWH	% of Possible	MWH	% of Possible	
Full Scheduled	0	0.00	107,101	1.31	3
Partial Scheduled	0	0.00	34,677	0.43	4
Full Forced	0	0.00	232,840	2.85	5
Partial Forced	0	0.00	89,686	1.10	6
Economic Dispatch	0	0.00	0	0.00	7
Possible MWH	684,480		8,155,560		8

* See 'Notes for Nuclear Units' filed with the January 2010 report.

** Gross of Power Agency

	Month of July 2010		Twelve Month Summary		See Notes*
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MDC	900 MW		912 MW		1
Period Hours	744 HOURS		8,760 HOURS		
Net Generation	677,181 MWH		7,974,619 MWH		2
Capacity Factor	101.13 %		99.84 %		
Equivalent Availability	100.00 %		98.46 %		
Output Factor	101.13 %		101.18 %		
Heat Rate	10,872 BTU/KWH		10,700 BTU/KWH		
	MWH	% of Possible	MWH	% of Possible	
	-----	-----	-----	-----	
Full Scheduled	0	0.00	0	0.00	3
Partial Scheduled	0	0.00	9,393	0.12	4
Full Forced	0	0.00	105,870	1.33	5
Partial Forced	0	0.00	11,640	0.15	6
Economic Dispatch	0	0.00	0	0.00	7
Possible MWH	669,600		7,989,120		8

* See 'Notes for Nuclear Units' filed with the January 2010 report.

** Gross of Power Agency

	Month of July 2010		Twelve Month Summary		See Notes*
MDC	724 MW		730 MW		1
Period Hours	744 HOURS		8,760 HOURS		
Net Generation	166,828 MWH		4,445,905 MWH		2
Capacity Factor	30.97 %		69.59 %		
Equivalent Availability	32.18 %		67.65 %		
Output Factor	79.76 %		101.90 %		
Heat Rate	11,805 BTU/KWH		10,671 BTU/KWH		
	MWH	% of Possible	MWH	% of Possible	
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Full Scheduled	329,492	61.17	1,644,116	25.73	3
Partial Scheduled	21,363	3.97	27,365	0.43	4
Full Forced	0	0.00	381,596	5.97	5
Partial Forced	20,973	3.89	31,226	0.49	6
Economic Dispatch	0	0.00	0	0.00	7
Possible MWH	538,656		6,390,420		8

* See 'Notes for Nuclear Units' filed with the January 2010 report.

	Month of July 2010		Twelve Month Summary		See Notes*
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MDC	727 MW		733 MW		1
Period Hours	744 HOURS		8,760 HOURS		
Net Generation	413,393 MWH		4,676,530 MWH		2
Capacity Factor	76.43 %		72.83 %		
Equivalent Availability	88.82 %		94.61 %		
Output Factor	81.93 %		78.83 %		
Heat Rate	10,521 BTU/KWH		10,589 BTU/KWH		
	MWH	% of Possible	MWH	% of Possible	
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Full Scheduled	36,301	6.71	268,017	4.17	3
Partial Scheduled	21,181	3.92	37,515	0.58	4
Full Forced	0	0.00	5,874	0.09	5
Partial Forced	2,988	0.55	32,354	0.50	6
Economic Dispatch	67,025	12.39	1,400,447	21.81	7
Possible MWH	540,888		6,420,350		8

* See 'Notes for Fossil Units' filed with the January 2010 report.

** Gross of Power Agency

	Month of July 2010		Twelve Month Summary		See Notes*
MDC	662 MW		665 MW		1
Period Hours	744 HOURS		8,760 HOURS		
Net Generation	454,122 MWH		3,800,790 MWH		2
Capacity Factor	92.20 %		65.25 %		
Equivalent Availability	97.62 %		73.09 %		
Output Factor	92.20 %		86.10 %		
Heat Rate	9,041 BTU/KWH		9,005 BTU/KWH		
	MWH	% of Possible	MWH	% of Possible	
Full Scheduled	0	0.00	1,214,397	20.85	3
Partial Scheduled	10,617	2.16	70,496	1.21	4
Full Forced	0	0.00	196,408	3.37	5
Partial Forced	1,128	0.23	89,081	1.53	6
Economic Dispatch	26,661	5.41	452,784	7.77	7
Possible MWH	492,528		5,825,400		8

* See 'Notes for Fossil Units' filed with the January 2010 report.

	Month of July 2010		Twelve Month Summary		See Notes*
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MDC	693 MW		696 MW		1
Period Hours	744 HOURS		8,760 HOURS		
Net Generation	460,829 MWH		4,346,172 MWH		2
Capacity Factor	89.38 %		71.34 %		
Equivalent Availability	99.31 %		94.10 %		
Output Factor	89.38 %		75.22 %		
Heat Rate	10,525 BTU/KWH		10,844 BTU/KWH		
	MWH	% of Possible	MWH	% of Possible	
	-----	-----	-----	-----	
Full Scheduled	0	0.00	314,792	5.17	3
Partial Scheduled	0	0.00	9,096	0.15	4
Full Forced	0	0.00	0	0.00	5
Partial Forced	3,541	0.69	34,929	0.57	6
Economic Dispatch	51,222	9.93	1,387,432	22.77	7
Possible MWH	515,592		6,092,580		8

* See 'Notes for Fossil Units' filed with the January 2010 report.

	Month of July 2010		Twelve Month Summary		See Notes*
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MDC	698 MW		702 MW		1
Period Hours	744 HOURS		8,760 HOURS		
Net Generation	436,621 MWH		4,705,918 MWH		2
Capacity Factor	84.08 %		76.50 %		
Equivalent Availability	96.18 %		97.60 %		
Output Factor	84.08 %		77.34 %		
Heat Rate	11,886 BTU/KWH		11,861 BTU/KWH		
	MWH	% of Possible	MWH	% of Possible	
	<hr/>	<hr/>	<hr/>	<hr/>	
Full Scheduled	0	0.00	24,920	0.41	3
Partial Scheduled	19,520	3.76	71,753	1.17	4
Full Forced	0	0.00	5,596	0.09	5
Partial Forced	310	0.06	45,559	0.74	6
Economic Dispatch	62,862	12.10	1,298,161	21.10	7
Possible MWH	519,312		6,152,440		8

* See 'Notes for Fossil Units' filed with the January 2010 report.

** Gross of Power Agency

Plant	Unit	Current MW Rating	January 2009 - December 2009	July 2010	January 2010 - July 2010
Asheville	1	191	70.87	74.52	77.37
Asheville	2	185	59.45	74.35	69.32
Cape Fear	5	144	63.73	85.71	78.68
Cape Fear	6	172	62.21	80.58	74.27
Lee	1	74	50.63	76.93	75.71
Lee	2	77	41.80	69.32	61.88
Lee	3	246	58.82	80.19	76.13
Mayo	1	727	62.45	76.43	78.14
Robinson	1	177	61.18	71.79	75.16
Roxboro	1	369	79.40	94.46	83.37
Roxboro	2	662	73.67	92.20	60.81
Roxboro	3	693	62.76	89.38	82.63
Roxboro	4	698	71.40	84.08	79.88
Sutton	1	97	39.14	48.99	53.63
Sutton	2	104	44.65	67.97	56.90
Sutton	3	403	48.01	66.23	60.23
Weatherspoon	1	48	13.92	59.71	46.66
Weatherspoon	2	48	14.93	58.50	39.93
Weatherspoon	3	75	23.59	56.58	57.26
Fossil System Total		5,190	62.52	80.57	72.97
Brunswick	1	938	97.67	100.39	67.72
Brunswick	2	920	79.50	100.56	96.18
Harris	1	900	93.90	101.13	100.41
Robinson Nuclear	2	724	104.08	30.97	46.30
Nuclear System Total		3,482	93.18	86.19	79.20
Total System		8,672	74.79	82.83	75.49

Amended SC Fuel Rule
Related to Nuclear Operations

There shall be a rebuttable presumption that an electrical utility made every reasonable effort to minimize cost associated with the operation of its nuclear generation system if the utility achieved a net capacity factor of $\geq 92.5\%$ during the 12 month period under review. For the test period March 1, 2010 through July 31, 2010, actual period to date performance is summarized below:

Period to Date: March 1, 2010 to July 31, 2010

Nuclear System Capacity Factor Calculation (Based on net generation)

A.. Nuclear system actual generation for SCPSC test period A = 9,484,113 MWH

B. Total number of hours during SCPSC test period B = 3,671 hours

C. Nuclear system MDC during SCPSC test period (see page 2) C = 3,482 MW

D. Reasonable nuclear system reductions (see page 2) D = 3,556,008 MWH

A. SC Fuel Case nuclear system capacity factor: $[(A + D) / (B + C)] * 100 = 102.0\%$

NOTE:

If Line Item E $> 92.5\%$, presumption of utility's minimum cost of operation.

If Line Item E $< 92.5\%$, utility has burden of proof of reasonable operations.

Amended SC Fuel Rule
Nuclear System Capacity Factor Calculation
Reasonable Nuclear System Reductions
Period to Date: March 1, 2010 to July 31, 2010

Nuclear Unit Name and Designation	BNP Unit # 1	BNP Unit # 2	HNP Unit # 1	RNP Unit # 2	Nuclear System
Unit MDC	938 MW	920 MW	900 MW	724 MW	3,482 MW
Reasonable refueling outage time (MWH)	1,335,783	0	0	1,644,116	
Reasonable maintenance, repair, and equipment replacement outage time (MWH)	92,159	26,110	2,368	364,032	
Reasonable coast down power reductions (MWH)	0	0	0	0	
Reasonable power ascension power reductions (MWH)	55,192	464	0	21,363	
Prudent NRC required testing outages (MWH)	8,172	5,650	599	0	
SCPSC identified outages not directly under utility control (MWH)	0	0	0	0	
Acts of Nature reductions (MWH)	0	0	0	0	
Reasonable nuclear reduction due to low system load (MWH)	0	0	0	0	
Unit total excluded MWH	1,491,306	32,224	2,967	2,029,511	
Total reasonable outage time exclusions [carry to Page 1, Line D]					3,556,008